DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-021919
Date Inspected: 03-Mar-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: Geng Wei

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG Components

Summary of Items Observed:
On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

NDT
BAY 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 08437.
Magnetic Particle Testing (MT).

This QA inspector performed MT of approximately 15 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designation reviewed is as follows:

DP3167-001-019.

WELDING
This QA Inspector observed the following work in progress:

BAY 14
This QA Inspector observed ZPMC qualified welding personnel identified as 037932 perform repair welding by

Shielded Metal Arc Welding (SMAW), on Deck panel of OBG Segment 14E. Weld joint is identified as DP3161-001-020. ABF Quality Assurance (QA) Inspector identified as Luo Lai Quan was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and welding repair report B-WR20269. This QA Inspector noted welding variables were 180~195 amperes and 26.2 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066416 perform repair welding by Shielded Metal Arc Welding (SMAW), on Deck panel of OBG Segment 14E. Weld joint is identified as DP3162-001-244. ABF Quality Assurance (QA) Inspector identified as Luo Lai Quan was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and welding repair report B-WR20222. This QA Inspector noted welding variables were 190~205 amperes and 25.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 037932 perform repair welding by Shielded Metal Arc Welding (SMAW), on Deck panel of OBG Segment 14E. Weld joint is identified as DP3161-001-211, 212. ABF Quality Assurance (QA) Inspector identified as Luo Lai Quan was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and welding repair report B-WR20276. This QA Inspector noted welding variables were 184~200 amperes and 25 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066041 perform welding by Flux Cored Arc Welding (FCAW), on OBG Segment 13BE. Weld joint is identified as DP3091-001-022. ZPMC Quality Control (QC) Inspector identified as Zhong Yong Gang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 258~270 amperes and 27.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 206623 perform welding by Flux Cored Arc Welding (FCAW), on OBG Segment 13BE. Weld joint is identified as SEG3009G-003. ZPMC Quality Control (QC) Inspector identified as Zhong Yong Gang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 242~265 amperes and 25.3 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 069894 perform repair welding by Shielded Metal Arc Welding (SMAW), on OBG Segment 14E. Weld joint is identified as SEG3019E-2-147. ZPMC Quality Control (QC) Inspector identified as Zhu Yuan Yuan was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and welding repair report B-WR20332. This QA Inspector noted welding variables were 140~160 amperes and 24 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 050232 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam of OBG Segment 14E. Weld joint is identified as FB2271-001-136.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

ZPMC Quality Control (QC) Inspector identified as Zhu Yuan Yuan was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-B-U2-FCM-1. This QA Inspector noted welding variables were 134~155 amperes and 24.6 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ABF qualified NDT personnel perform Magnetic particle testing (MT) on deck panel diaphragm to deck panel diaphragm weld and deck panel diaphragm to floor beam flange weld on OBG Segment 13BE panel point 122, after back gouging. Weld joints are identified as SEG3009C-003, 004, 005. See attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye,Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer